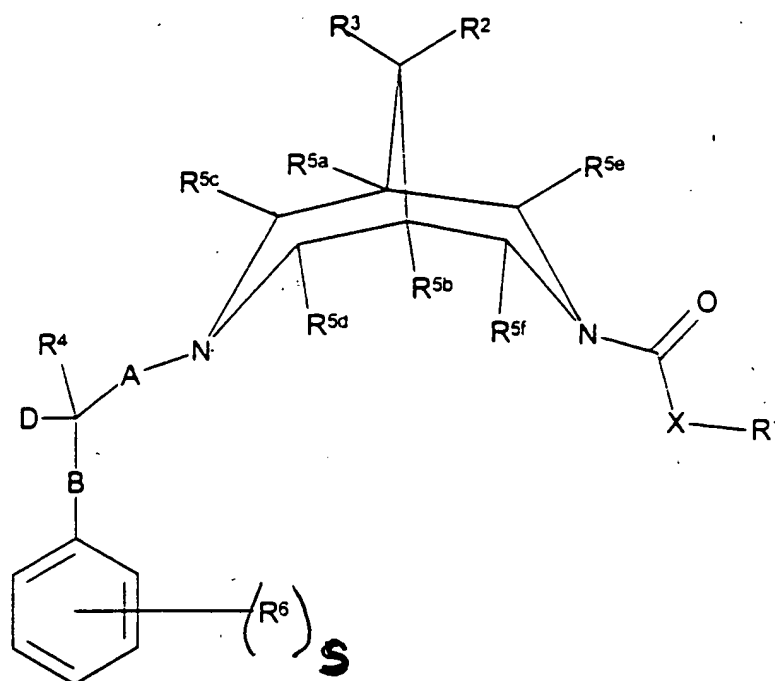


1. (Amended) A compound of formula I



wherein

R¹ represents C₁₋₁₂ alkyl, -(CH₂)_a-aryl, or -(CH₂)_a-Het¹ (all of which are optionally substituted by one or more substituents selected from the group consisting of -OH, halo, cyano, nitro, C₁₋₄ alkyl and C₁₋₄ alkoxy);

a represents 0, 1, 2, 3, or 4;

Het¹ represents a five to ten-membered heterocyclic ring containing one or more heteroatoms selected from the group consisting of oxygen, nitrogen and sulfur, and which also optionally includes one or more =O substituents;

X represents O or S;

R^{5a}, R^{5b}, R^{5c}, R^{5d}, R^{5e} and R^{5f} independently represent H or C₁₋₃ alkyl;

R^2 and R^3 independently represent H, C_{1-4} alkyl (optionally substituted with one or more nitro or cyano groups), OR^7 , $N(R^{7a})R^{7b}$, $OC(O)R^8$ or together form $-O-(CH_2)_2-O-$, $-(CH_2)_3-$, $-(CH_2)_4-$ or $-(CH_2)_5-$

R^7 and R^8 independently represent H, C_{1-6} alkyl or $-(CH_2)_b$ -aryl (which latter two groups are optionally substituted by one or more substituents selected from the group consisting of $-OH$, halo, cyano, nitro, C_{1-4} alkyl and C_{1-4} alkoxy);

R^{7a} and R^{7b} independently represent H or C_{1-6} alkyl;

b represents 0, 1, 2, 3 or 4;

R^4 represents H or C_{1-6} alkyl;

D represents H, C_{1-4} alkyl, $-OR^9$, or $-(CH_2)_cN(R^{10})(R^{11})$;

R^9 represents H, C_{1-6} alkyl, $-C(O)R^{12}$, $-(CH_2)_d$ -aryl or $-(CH_2)_d$ -Het² (which latter three groups are optionally substituted by one or more substituents selected from the group consisting of $-OH$, halo, cyano, nitro, C_{1-4} alkyl, C_{1-4} alkoxy, $C(O)R^{13}$, $C(O)OR^{14}$ and $-N(H)S(O)_eR^{15}$);

R^{10} represents H, C_{1-6} alkyl, $-(CH_2)_f$ -aryl, $-C(NH)NH_2$, $-S(O)_2R^{15a}$, $-C(O)_gN(R^{16})(R^{17})$, $C(O)R^{18}$ or $-C(O)OR^{19}$;

e represents 0, 1 or 2;

g represents 1 or 2;

R^{11} represents H, C_{1-6} alkyl, $-C(O)R^{20}$ or $-(CH_2)_h$ -aryl (which latter group is optionally substituted by one or more substituents selected from the group consisting of $-OH$, cyano, halo, amino, nitro, C_{6} alkyl and C_{6} alkoxy);

R^{12} , R^{13} , R^{14} , R^{16} , R^{17} , R^{18} , R^{19} and R^{20} independently represent H, C_{1-6} alkyl, Het³ or $-(CH_2)_j$ -aryl (which latter three groups are optionally substituted by one or more

substituents selected from the group consisting of -OH, cyano, halo, amino, nitro, C₁₋₆ alkyl and C₁₋₆ alkoxy);

R¹⁵ and R^{15a} independently represent C₁₋₆ alkyl, aryl or -(CH₂)_k-aryl (all of which are all optionally substituted by one or more substituents selected from the group consisting of halo, nitro, C₁₋₆ alkyl and C₁₋₆ alkoxy);

c, d, f, h, j and k independently represent 0, 1, 2, 3 or 4;

Het² and Het³ independently represent five to ten-membered heterocyclic rings containing one or more heteroatoms selected from the group consisting of oxygen, nitrogen and sulfur, and which also optionally includes one or more =O substituents;

E
B1
cont
E
R⁶ ~~represents one or more~~ ^{is an} optional substituents selected from the group consisting of -OH, cyano, halo, amino, nitro, C₁₋₆ alkyl (optionally terminated by N(H)C(O)OR^{20a}), C₁₋₆ alkoxy, -C(O)N(H)R²¹, -NHC(O)N(H)R²², -N(H)S(O)₂R²³ and -OS(O)₂R²⁴; where s is 1, 2, 3, 4 or 5

R²¹ and R²² independently represent H or C₁₋₆ alkyl;

R^{20a}, R²³ and R²⁴ independently represent C₁₋₆ alkyl;

A represents a single bond, C₁₋₆ alkylene, N(R²⁵)(CH₂)_m, O(CH₂)_m or (CH₂)_mC(H)(OR²⁵)(CH₂)_n- (in which latter three groups, the -(CH₂)_m- group is attached to the bispidine nitrogen atom and which latter four groups are optionally substituted by one or more -OH groups);

B represents a single bond, C₁₋₄ alkylene, -(CH₂)_pN(R²⁶)-, -(CH₂)_pS(O)_q-, -(CH₂)_pO- (in which three latter groups, the -(CH₂)_p- group is attached to the carbon atom bearing D and R⁴), -C(O)N(R²⁶)- (in which latter group, the -C(O)- group is attached to the carbon atom bearing D and R⁴),

$-N(R^{26})C(O)O(CH_2)_p-$ or $-N(R^{26})(CH_2)_p-$ (in which latter two groups, the $N(R^{26})$ group is attached to the carbon atom bearing D and R^4);

m, n and p independently represent 0, 1, 2, 3 or 4;

q represents 0, 1 or 2;

R^{25} represents H, C_{1-6} alkyl or $C(O)R^{27}$;

R^{26} represents H or C_{1-6} alkyl;

R^{27} represents H, C_{1-6} alkyl, Het^4 or $-(CH_2)_r$ -aryl (which latter two groups are optionally substituted by one or more substituents selected from the group consisting of -OH, cyano, halo, amino, nitro, C_{1-6} alkyl and C_{1-6} alkoxy);

Het^4 represents a five to ten-membered heterocyclic ring containing one or more heteroatoms selected from the group consisting of oxygen, nitrogen and sulfur, and which also optionally includes one or more =O substituents;

r represents 0, 1, 2, 3 or 4;

or a pharmaceutically acceptable derivative thereof;

provided that:

(a) R^{5a} , R^{5b} , R^{5c} , R^{5d} , R^{5e} and R^{5f} do not all simultaneously represent H;

(b) R^{5a} and R^{5b} do not represent C_{1-3} alkyl when R^{5c} , R^{5d} , R^{5e} , and R^{5f} , all represent H;
and

(c) when D represents -OH or $-(CH_2)_cN(R^{10})R^{11}$ in which c represents 0, then: -

(i) A does not represent $N(R^{25})(CH_2)_m$, $O(CH_2)_m$ or

$-(CH_2)_mC(H)(OR^{25})(CH_2)_n-$ (in which n is 0); and/or

(ii) p does not represent 0 when B represents $-(CH_2)_pN(R^{26})-$,

$-(CH_2)_pS(O)_q$ or $-(CH_2)_pO-$.

NE

13. (Twice Amended) A pharmaceutical formulation including an effective amount of a compound as defined in Claim 1 in admixture with a pharmaceutically-acceptable adjuvant, diluent or carrier.

19. (Twice Amended) A method of prophylaxis or treatment of an arrhythmia which method comprises administration of a therapeutically effective amount of a compound as defined in Claim 1 to a [person suffering from, or susceptible to, such a condition] patient in need thereof.

Please add the following new claim:

B² 21²⁷ (New) A method according to claim 19 wherein the arrhythmia is an atrial or a ventricular arrhythmia.